

Press Release

October 4, 2021

New Max Planck Research Group to Focus on Practices of Validation in the Biomedical Sciences

Recent debates around the reliability of Covid-19 antigen tests have emphasized the importance of methods of validation: How do we know that we can sufficiently trust such tests? The new interdisciplinary Research Group "Practices of Validation in the Biomedical Sciences" at the Max Planck Institute for the History of Science (MPIWG) will bring questions around the history and philosophy of the validity of diagnostic tests and medical studies into focus. The group will be led by Dr. Lara Keuck, who has published widely on the history and philosophy of biomedicine. She spent the previous six years leading a junior research group at the Humboldt University in Berlin.

The *reliability* of Covid-19 tests has become an issue of political and public concern in recent months. Can we rely on them enough to re-open schools, shops, and museums without exacerbating the pandemic? Scientists have discussed the validity of these tests in public using terminology such as "specificity" and "sensitivity." What has been neglected is that these terms themselves have a history: their meanings have been established on the basis of their utility in relation to particular diseases, and have been linked to different methods and techniques. This Research Group traces these histories and analyzes how previous assumptions still resonate today: How has validity been practiced, and how has uncertainty been conceived, regulated, and argued with?

Through the history of validity, the Research Group will highlight the evolution of modern medical research and address contemporary challenges in translating and evaluating biomedical knowledge. "I am curious to elucidate the connections and differences between the use of concepts and practices of validation precisely because biomedical research is so diverse," Keuck says. "In the second half of the twentieth century, 'validation' was defined for very different areas, for example for the regulation of toxicology tests or in psychiatric research. How did this come about? To date, there are no studies that historically and systematically compare different meanings and methods of validation."

The Research Group will assemble not only historians and philosophers of medicine, but also scholars from other humanities and social sciences as well as medical fields. "We are excited to welcome the life sciences back at our institute in the form of this new interdisciplinary Research Group," says Managing Director Dagmar Schäfer. "Lara Keuck's research is integral in examining the foundations of biomedical knowledge and clearly connects to recent debates in science and society."

"I am very much looking forward to experimenting with different forms of collaborative and transdisciplinary research," adds Keuck. "The MPIWG brings together such a diversity of approaches and an immense variety of case studies that collectively and comparatively show that nothing can be taken for granted. This makes this institute a particularly apt place not only for historicizing the

Boltzmannstraße 22 14195 Berlin, Germany www.mpiwg-berlin.mpg.de



foundations of scientific knowledge, but also for discussing our own methodological assumptions and choices in doing history of science and philosophy of medicine."

Biography: Dr. Lara Keuck

Dr. Lara Keuck holds a PhD in the History, Theory, and Ethics of Medicine from the Johannes Gutenberg University Mainz, which was co-supervised at the École normale supérieure in Paris. Before joining the MPIWG in April 2021, she led the junior research group "Learning from Alzheimer's Disease: A History of Biomedical Models of Mental Illness" at the Humboldt-Universität zu Berlin, funded by the The Branco Weiss Fellowship – Society in Science of ETH Zurich. In 2020, Keuck was elected as a member of the Junge Akademie (BBAW and Leopoldina).

Selected Publications

- Keuck, Lara. "A Window to Act? Revisiting the Conceptual Foundations of Alzheimer's Disease in Dementia Prevention." In *Preventing Old Age and Decline? Critical Observations on Aging and Dementia*, edited by Annette Leibing and Silke Schicktanz, 19–39. New York: Berghahn, 2020.
- Keuck, Lara. "History as a Biomedical Matter: Recent Reassessments of the First Cases of Alzheimer's Disease." *History and Philosophy of the Life Sciences* 40, no. 1 (2018).
- Keuck, Lara. "Diagnosing Alzheimer's Disease in Kreapelin's Clinic, 1909–1912." *History of the Human Sciences* 32, no. 2 (2018): 42–64.
- Keil, Geert, Lara Keuck and Rico Hauswald. 2017. *Vagueness in Psychiatry*. Oxford: Oxford University Press.
- Huber, Lara and Lara Keuck. "Philosophie der biomedizinischen Wissenschaften." In *Grundriss Wissenschaftsphilosophie. Die Philosophien der Einzelwissenschaften*, edited by Thomas Reydon and Simon Lohse, 287–318. Freiburg: Meiner, 2017.
- Huber, Lara and Lara Keuck. "Mutant Mice: Experimental Organisms as Materialised Models in Biomedicine." *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 44 (2013): 385–391.

Links

- Research Group: <u>www.mpiwg-berlin.mpg.de/research/departments/max-planck-research-group-biomedical-sciences</u>
- Profile, Dr. Lara Keuck: <u>https://www.mpiwg-berlin.mpg.de/de/users/lkeuck</u>
- Subscribe to MPIWG Newsletter: <u>www.mpiwg-berlin.mpg.de/newsletter</u>

About the MPIWG

Founded in 1994, the Max Planck Institute for the History of Science (MPIWG) in Berlin, Germany, is one of the more than 80 research institutes administered by the Max Planck Society. It is dedicated to the study of the history of science and aims to understand scientific thinking and practice as historical phenomena, with projects spanning globally and across all eras of human history.

Press Enquiries

Stephanie Hood, Deputy Head, Communications Max Planck Institute for the History of Science, Boltzmannstr. 22, D-14195 Berlin Email: <u>public@mpiwg-berlin.mpg.de</u>. Telephone: (+4930) 22667 315